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## **Ochuko Felix Orikpete**

Centre for Occupational Health, Safety & Environment, University of Port Harcourt, Choba, Rivers State, Nigeria.

Correspondence: Ochuko Felix Orikpete Centre for Occupational Health, Safety & Environment, University of Port Harcourt Choba Biyer

Port Harcourt, Choba, Rivers State, Nigeria.

# The Effect of Covid-19 on the Practice of Health and Safety in Nigeria

## **Ochuko Felix Orikpete**

#### Abstract

The goal of this study was to find out how COVID-19 has impacted on the practice of health and safety in Nigeria. The study used a descriptive and explanatory design to collect data, which included questionnaires as well as library research. The data was evaluated using frequency tables at a 5% level of significance, and the results were reported as frequency tables and percentages. COVID-19 has a significant impact on the practice of health and safety in Nigeria, according to the findings of the study.

Keywords: Health and safety practice, COVID-19, compliance.

## 1. Introduction

Due to the outbreak of a pneumonia of unknown origin in Wuhan, Hubei Province, Chinese Health Authorities initially identified the novel corona virus illness 2019, COVID-19, which is caused by the severe acute respiratory syndrome virus 2 (SARS-CoV-2) (Ihekweazu, 2020). SARS-CoV-2, like SARS and Middle East Respiratory Syndrome (MERS), is likely zoonotic in origin and spreads between humans via respiratory droplets and mucosal membranes. It has quickly spread over the world since its inception in 2019 (WHO, 2020).

On January 30, 2020, the World Health Organization (WHO) designated the new corona virus epidemic as a Public Health Emergency of International Concern (PHEIC) (WHO, 2020). As COVID-19 expanded to other countries and caused a growing number of deaths, WHO dispatched a team of specialists from eight countries, including Nigeria, to China to assess the outbreak's scope, the strength of the response, and best practices. Following that, the World Health Organization designated COVID-19 a pandemic on March 11, 2020, urging governments to respond quickly and aggressively.

The Federal Health Ministry in Nigeria certified the first COVID-19 case in Ogun State, Nigeria, on February 27, 2020, making Nigeria the third African country to recognize an imported COVID-19 case following Egypt and Algeria. The index case included an Italian citizen who came in from Milan in Italy to Lagos, Nigeria on the 24th of February, 2020, and then took a private vehicle to his company's location in Ogun State that day. He presented to the corporate clinic with symptoms compatible with COVID-19 on February 26, 2020, and was directed to the Infectious Disease Hospital (IDH) in Lagos on February 27, 2020, where a COVID-19 diagnosis was verified by real-time reverse transcription polymerase chain reaction (RT- PCR).

A total of 216 contacts were selected for 14-day follow-up in Lagos and Ogun States, including passengers on the February 24 aircraft, with 40 of these connections being categorized as high-risk. An asymptomatic contact of the first case in Ogun State was validated as the country's second case of COVID-19 eleven days after.

Since then, the epidemiology of COVID-19 in Nigeria has changed, with cases reported in 35 of the country's 36 states, as well as the Federal Capital Territory (FCT). Despite Lagos State being the epicentre of the outbreak at first, Kano State and the Federal Capital Territory have now joined Lagos State as high-burden states, accounting for 64.5 percent of all confirmed cases in Nigeria by the end of May 2020. In Nigeria, 63 882 people were tested for COVID-19 between February 27 and May 31, 2020, with 10 162 (15.9%) of them being confirmed as

infected with SARS-CoV-2 by a technique known as reverse transcription polymerase chain reaction (RT-PCR). Males appeared to be disproportionately affected, with 67.7% (6,882) of confirmed cases being male. The confirmed COVID-19 cases have resulted in a total of 287 deaths, resulting in a case fatality ratio (CFR) of roughly 2.8 percent (Ihekweazu, 2020).

# 2.1 Covid-19 Outbreak Health Preparedness in Nigeria

Prior to the arrival of COVID-19 in Nigeria, the government formed a "Coronavirus readiness group" under the Nigeria Centre for Disease Control (NCDC), the country's major public health body, which began screening travelers at point-of-entry. Based on lessons acquired from the Ebola Virus Disease outbreak, the NCDC strengthened the National Reference Laboratory with diagnostic capacity for epidemic-prone diseases. The NCDC helped 22 of the 32 states create emergency operations centres (EOCs) and trained rapid response teams in all 36 states during this process (Ihekweazu, 2020).

In addition, the agency provided relating to public health advice to Nigerians, exchanged case definition and preventive information with networks of national and subnational public health workers, enhanced five diagnostic laboratories, and created capacity for contact tracing and case management (Adepoju, 2020).

The country's Polio infrastructure, which was created with the goal of eradicating poliomyelitis, is also crucial to COVID-19 preparation. Technical skills, logistical capability, human resources, a community network, and disease surveillance experience are all brought to the table by the framework. Each state's EOCs are modeled after the Polio EOC, and have six functional units: point of entry, epidemiology and surveillance, risk communication, management and communication, case management, and laboratory services (World Health Organization, 2020). The polio infrastructure was critical to the 2014 Ebola Virus Disease outbreak response's success. It currently provides technical assistance to government agencies such as the NCDC (Global Polio Eradication Initiative, 2020) and has an on-the-ground network of human resources to support the COVID-19 response, including traditional and religious leaders, community mobilizers, and health workers. In addition, the Polio infrastructure included an SMS-based application called auto-visual AFP detection and reporting (AVADAR), which aided disease surveillance via networks of community volunteers and healthcare staff. COVID-19 surveillance questions have been added to this app, making it helpful for the current pandemic (World Health Organization, 2020).

## 2.2 Challenges And Impact of Covid-19 Outbreak on The Practice of Health and Safety

Salako et al., (2020) were of the opinion that Nigeria has been rated better than many African countries for responding to the COVID-19 outbreak, with an Epidemic Preparedness Index of 38.9 percent. However, its ability to respond adequately in the face of local and community transmission has been questioned according to (Grainger, 2020). As of 10th April 2020, over 9,000 contacts have been traced, which is an average of 3.5 contacts per confirmed case. About 118,000 house-holds were visited for active case searches within 2 days in Lagos, among which 119 confirmed cases were identified (Adepoju, 2020). The continued increase in the number of cases has overwhelmed the public health human resources involved in the various aspects of response activities, particularly contact tracing.

According to Salako et al. (2020), many clinical activities have been reduced or halted in order to control COVID-19 transmission. More so, there have been numerous complaints about the shortages of personal protective equipment and ventilators needed to combat COVID-19 (World Economic Forum, 2020). This is further compounded with reported COVID-19 infection among healthcare workers as a result of occupational exposures, a figure estimated as 113 (about 6% of confirmed COVID-19 cases) as of 1st May 2020 as affirmed by Ogundele (2020). The COVID-19 outbreak is also coming at a time when the country is currently battling with Lassa fever outbreak and preparing for certification exercise to be declared polio-free (Grainger, 2020). As of the Epidemiological week 16 of the year 2020, the country has recorded 979 confirmed cases and 188 deaths (CFR 19.2%), against 546 confirmed cases and 123 deaths (CFR 22.5%) in the corresponding epidemiological week of 2019 (Adepoju, 2020). Having being free of wild polio virus cases for a period of three years, the Independent Africa regional Certification is expected to make a decision in July 2020 to certify Nigeria polio-free (Adepoju, 2020). Response activities to this outbreak have a tendency to divert the limited resources away from current health issues and gains previously made on other health indices. The fear of being infected by COVID-19 at health facilities and the current lockdown order is also likely to limit access to health services routinely provided by Community Health Workers. These include routine immunization, ante-natal services, maternal, neonatal and child health services, family planning, Human Immunodeficiency Virus and Tuberculosis, management of minor ailments, disease surveillance and health management information system. Disruption of these health services could lead to reduction in immunization coverage, and increases in morbidity and mortality of infectious diseases as well as maternal, neonatal and childhood health issues.

# 2.3 Post Covid-19 Level of Health and Safety Practice

It has been proven that following conventional precautions reduces the danger of exposure to blood and body fluids, according to Adhikari et al. (2020). However, there is a high proportion of non-compliance among healthcare workers at times, which could be due to a lack of awareness of how to deploy COVID-19 protective barriers effectively among healthcare workers (Cascella et al., 2020). Lack of information, a high workload, forgetfulness, workplace safety, and the insight that colleagues did not share are all associated to noncompliance with COVID-19 safety rules among health practitioners. Noncompliance among healthcare workers may be attributed to their belief that adopting universal COVID19 prevention measures requires more effort, making some equipment operations hard to adapt due to day-to-day clinical demands (Nikhat & Fazil, 2020).

The most important factor influencing standard COVID-19 prevention guidelines according to Zhong et al. (2020) is the lack of provision of adequate protective equipment.

Although healthcare personnel may have similar training, their conduct may differ depending on how they perceive

the danger of COVID-19 infection (Lubna et al., 2020). Healthcare workers give a variety of reasons for not following universal COVID-19 infection precautions, including habit, lack of time, interference with operations, discomfort with protective equipment, shortages of supplies, carelessness, cost concerns, unexpected body fluid contact, and the risk of causing anxiety in patients (Lubna et al., 2020). According to Nikhat and Fazil (2020), worker education does not necessarily equate to protection against workplace hazards. This could be because the knowledge obtained does not always translate into cautious measures in practice, or because the training sessions provided are more theoretical than operational, or because there are limited sources of ongoing safety information. Low adherence to COVID-19 preventive guidelines may also be due to a lack of a suitable atmosphere in the health facility, such as a lack of constant running water or a scarcity of personal protective equipment (PPE).

The level of practice of universal precautions by healthcare workers may differ from one type of healthcare worker to another (Ihekweazu, 2020). Depending on whether they work in a rural or urban setting, healthcare workers' noncompliance may change. According to a study, eye protection compliance among healthcare personnel in rural north India is low. A substantial majority of healthcare workers did not follow the needle recapping precautions. According to the study, adherence to COVID-19 safety precautions was also connected to being on the job for a longer period of time, awareness of blood-borne disease transmission, and a strong commitment to workplace safety. According to the findings, initiatives to encourage healthcare practitioners in rural north India to follow COVID-19 safety procedures should focus on knowledge and awareness, as well as organizational safety measures.

The study was hampered by the self-report method of analyzing universal COVID-19 prevention guidelines, as the level of compliance may have been better investigated by observation. Because healthcare providers have a tendency to overestimate their adherence to routine COVID-19 prevention efforts, the overall picture may be less unfavorable than it is.

Nigerian healthcare employees are jeopardizing their own health by failing to follow COVID-19 prevention guidelines. However, in an environment where the number of COVID-19 patients is on the rise, universal measures are useless, according to the findings of this study. Training programmes and other associated initiatives were suggested as ways to urge healthcare workers to utilize protective barrier equipment properly at all times.

## 3. Methodology Research Design

# **Research Design**

According to Heinrich (2000), research designs are "the structure of investigation aimed at uncovering variables and their relationships to one another." The questionnaire serves as a useful guide to the data gathering process in this study. A survey research design was used in this study, which involved the distribution of questionnaires.

## **Population of the Study**

The study's participants are selected healthcare providers from various healthcare facilities in Lagos, Nigeria.

## Sample of the Study

At designated healthcare facilities, convenience sampling was used to select 200 health workers from the general community. This was chosen due to the researcher's financial strength and time constraints.

## **Instrument for Data Collection**

These are the methods or technologies used to collect information from respondents. Questionnaires and interviews were employed as research tools in this study. The study's principal research tool is a questionnaire, which is used to collect data from the sample respondents. The questionnaire is well-organized, with responses to the study's questions included.

This instrument is broken into two sections: Section A and Section B, with Section A containing the respondents' personal information and Section B containing a research statement based on the study questions. Each respondent is given a list of options or alternatives to pick from, and they must select or tick one of them.

# **Reliability and Validity of Instrument**

Validity refers to how well a research instrument measures what it was designed to measure, whereas reliability refers to the accuracy and precision of a measuring instrument. The test-retest approach was used to determine the study's reliability and validity. The questions in the questionnaire must be clear in order for it to be beneficial (that is, the questions will not be too complex). Following the completion of the questionnaire, a group of respondents will be interviewed to see whether their views on the issue are reliable.

# **Research Questions**

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	Strongly Agree	55	27.5	27.5	27.5
	Agree	49	24.5	24.5	52.0
	Undecided	48	24.0	24.0	76.0
	Disagree	33	16.5	16.5	92.5
	Strongly Disagree	15	7.5	7.5	100.0
	Total	200	100.0	100.0	

Table 1: There Is a Significant Impact of Covid-19 On the Practice of Safety and Health Standards Among Health Workers.

Source: field survey, February, 2022.

COVID-19 has a considerable impact on the practice of safety and health standards among health workers, according to respondents in Table 1.

COVID-19 has a considerable impact on the practice of safety and health standards among health workers, according to 55 respondents (or

27.5 percent). COVID-19 has a considerable impact on the practice of safety and health standards among health workers, according to 49 respondents (24.5 percent). There were 48 uncertain responders, or 24.0 percent of the total. COVID-19 has a significant impact on the practice of

safety and health standards among health workers, according to 33 respondents (16.5 percent), while COVID-19 has a significant impact on the practice of safety and health standards among health workers, according to the remaining 15 respondents (7.5 percent).

Table 2: Health Workers Are Well Educated about Occupational Safety and Health Precautions as a result of the Covid-19 Pandemic

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	strongly agree	100	50.0	50.0	50.0
	agree	19	9.5	9.5	59.5
	undecided	41	20.5	20.5	80.0
	disagree	20	10.0	10.0	90.0
	disagree	20	10.0	10.0	100.0
	Total	200	100.0	100.0	

Source: field survey, February, 2022.

As a result of the COVID-19 pandemic, health personnel have been well trained about occupational safety and health precautions, as seen in Table 2.

As a result of the COVID-19 pandemic, 100 respondents, or 50.0 percent, strongly agree that health personnel are properly trained about occupational safety and health precautions. As a result of the COVID-19 pandemic, 19 respondents, or 9.5 percent, think that health personnel are well trained about occupational safety and health

precautions. Undecided respondents accounted for 41 percent of the total, or 20.5 percent. As a result of the COVID-19 pandemic, 20 respondents (or

10.0 percent) disagree that health workers are well educated about occupational safety and health precautions, while the remaining 20 respondents (or 10.0 percent) strongly disagree that health workers are well educated about occupational safety and health precautions.

 

 Table 3: There Is a Significant Relationship Between Covid-19 Pandemic and The Improved Practice of Health and Safety Standards Among Health Workers in Nigeria.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	100	50.0	50.0	50.0
	agree	60	30.0	30.0	80.0
	undecided	5	2.5	2.5	82.5
	disagree	20	10.0	10.0	92.5
	Strongly agree	15	7.5	7.5	100.0
	Total	200	100.0	100.0	

Source: field survey, February, 2022.

Table 3 illustrates the views of respondents who believe there is a link between the COVID-19 pandemic and increased health and safety standards among Nigerian health workers.

There is a significant association between the COVID-19 pandemic and the better practice of health and safety norms among Nigerian health workers, according to 100 responders (50.0%).

There is a significant association between the COVID-19 pandemic and better health and safety standards among

Nigerian health workers, according to 60 responders (30.0%). Undecided respondents accounted for 5% of the total. Twenty respondents (10.0%) disagree that there is a significant relationship between the COVID-19 pandemic and improved health and safety standards among Nigerian health workers, while the remaining 15 respondents (7.5%) strongly disagree that there is a significant relationship between the COVID-19 pandemic and improved health and safety standards among Nigerian health and safety standards among Nigerian health and safety standards among Nigerian health workers.

 Table 4: Covid-19 pandemic has made health workers more aware of health and safety practice in other to stay safe.

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	strongly agree	80	40.0	40.0	40.0
	agree	100	50.0	50.0	90.0
	undecided	5	2.5	2.5	92.5
	disagree	10	5.0	5.0	97.5
	Strongly disagree	5	2.5	2.5	100.0
	Total	200	100.0	100.0	

Source: field survey, February, 2022.

The COVID-19 outbreak has made health workers more conscious of health and safety practices in order to keep safe, as shown in Table 4.

The COVID-19 outbreak has made health workers more conscious of health and safety practices in order to keep safe, according to 80 responders (40.0 percent).

The COVID-19 outbreak has made health workers more conscious of health and safety practices in order to keep safe, according to 100 responders (50.0%).

Undecided respondents accounted for 5% of the total. 10 respondents (5.0%) disagree that the COVID-19 virus

outbreak has made health workers more aware of health and safety practices in order to stay safe, while 5 respondents (2.5%) strongly disagree that the COVID-19 virus outbreak has made health workers more aware of health and safety practices in order to stay safe.

## 4. Conclusion

Covid-19 was reported to have a significant effect on the practices of health and safety as participants in the present study reported still adhering to the Covid-19 preventing guidelines such as washing of hands regularly, using of nose mask, applying hand sanitizers and lots more. It was therefore concluded that Covid-19 have effect on the practices of health and safety in Nigeria.

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